

DPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

S. Douglas Galbraith

Confirmation No.: Not Yet Assigned

Application No.: 10/582,314

Group Art Unit: Not Yet Assigned

Filing Date: September 12, 2006

Examiner: Not Yet Assigned

For: SORPTION METHOD, DEVICE, AND SYSTEM

DATE OF DEPOSIT: *January 12, 2007*

I HEREBY CERTIFY THAT THIS PAPER IS BEING
DEPOSITED WITH THE UNITED STATES POSTAL
SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID,
ON THE DATE INDICATED ABOVE AND IS
ADDRESSED TO THE UNITED STATES PATENT AND
TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA,
VA 22313-1450.

TYPED NAME: Elizabeth A. McLoud

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date

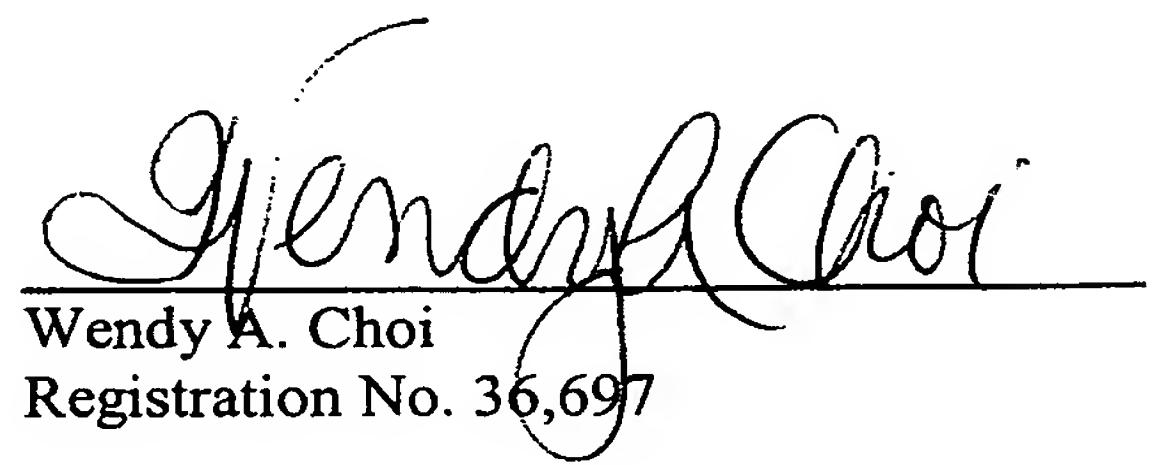
of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:
 - Certification in Accordance with § 1.97(e) is attached; or
 - The fee of \$180.00 as set forth in § 1.17(p) is attached.
- In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).
- Copies of reference numbers 10 - 14 listed on the attached Form PTO-1449 are enclosed herewith.
- Copies of reference numbers - on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(i).
- Copies of references 1 - 9 and 15 - 66 are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number 10/730,278, filed December 9, 2003 for which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.
- The relevance of those listed references which are not in the English language is as follows:

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

Date: January 12, 2007



Wendy A. Choi
Registration No. 36,697

WOODCOCK WASHBURN LLP
Cira Centre
2929 Arch Street, 12th Floor
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

© 2007 WW



Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. SDG-0039	Application No. 10/582,314
		Applicant S. Douglas Galbraith	
		Filing Date September 12, 2006	Group Not Yet Assigned
		Confirmation No. Not Yet Assigned	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	1	Boscolo, I. et al., "Application of Ferroelectric Cathodes to Enhance the ION Yield in the Caesar Source at LNS", <i>Proceedings of EPAC, 2000</i> , 1631-1633	
	2	Collins, P. et al., "Creating High Performance Conductive Composites with Carbon Nanotubes", www.Hyperioncatalysis.com , <i>Materials Managers Symposium, June 2004</i> , 8 Pages	
	3	Fuhr, G. et al., "Travelling Wave-Driven Microfabricated Electrohydrodynamic Pumps for Liquids", <i>J. Micromech. Microeng.</i> , 1994, 217-226	
	4	Gitlin, I. et al., "Pumping Based on Transverse Electrokinetic Effects", <i>Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, U.S.A.</i> 15 pages	
	5	Judkins, R.R. et al., "CO ₂ Removal from Gas Streams using a Carbon Fiber Composite Molecular Sieve", <i>8th Conference on Fundamentals of Absorption, May 2004</i> , 14 pages	
	6	Kong, M.G. et al., "Wave Form to Produce most Efficiency Discharges", <i>Dept. of Electronic and Electrical Engineering</i> , http://www.ee.ualberta.ca/icops2002/programest/1A.htm , April 20, 2004, 1 page	
	7	Ter Brake, H.J.M. et al., "Vibration Free 5K Sorption Cooler" for ESA's Darwin Mission", <i>University of Twente, Faculty of Applied Physics, MESA Research Institute, Cryogenics, Feb 2002</i> , 42(2), 14 pages	
	8	Wang, R.Z. et al., "Adsorption Mechanism and Improvements of the Adsorption Equation for Adsorption Refrigeration Pairs", <i>International Journal of energy Research</i> , 1999, 23, 887-898	
	9	Roth, J.R., "Subsonic Plasma Aerodynamics Using Paraelectric and Peristaltic Electrohydrodynamic (EHD) Effects", <i>Department of Electrical and Computer Engineering, University of Tennessee, Knoxville, Presented at the 29th IEEE International Conference on Plasma Science, May 26-30, 2002</i>	
	10	Curtis, F.W., <u>High-Frequency Induction Heating</u> , <i>Lindsay Publications</i> , 1987, 12-15 and 218-220 (Chapter IX)	
	11	Dean, K.A., et al., "Current saturation mechanisms in carbon nanotube field emitters," <i>J. Appl. Physics Lett.</i> , 2000, 76(3), 375-377	
	12	Hubble, J., "Biochemical Separations – Adsorption and chromatographic separations," www.bath.ac.uk/~cesjh/adsorb.htm , downloaded from the Internet on October 6, 2006, 1-32	
	13	Feng, C., et al., "Breakthrough and desorption characteristics of a microtrap," <i>J. of Microcolumn Separation</i> , 2000, 12(4), 267-275	

EXAMINER

DATE CONSIDERED

Form PTO-1449 Modified		Docket No. SDG-0039	Application No. 10/582,314			
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant S. Douglas Galbraith				
U.S. Department of Commerce Patent and Trademark Office		Filing Date September 12, 2006	Group Not Yet Assigned			
		Confirmation No. Not Yet Assigned				
U. S. PATENT DOCUMENTS						
Examiner Initial		Document No.	Date	Name	Class	Subclass
	15	3,359,707	12/06/67	O.A.L. Jean	55	33
	16	3,771,234	11/13/73	Forster, et al.	34	1
	17	3,727,375	04/17/73	Wallace	55	2
	18	3,730,885	05/01/73	Makrides, et al.	210	30
	19	4,011,306	03/08/77	Fox, Jr.	423	579
	20	4,038,050	07/26/77	Lowther	95	1
	21	4,094,652	06/13/78	Lowther	96	143
	22	4,114,380	09/19/78	Ceperley	60	721
	23	4,316,233	02/16/82	Chato, et al.	361	233
	24	4,322,394	03/30/82	Mezey, et al.	423	244.11
	25	4,954,320	09/04/90	Birmingham, et al.	422	186.04
	26	4,964,889	10/23/90	Chao	95	96
	27	5,085,780	02/04/92	Ostreicher	210	683
	28	5,505,825	04/09/96	Gold, et al.	95	126
	29	5,085,780	02/04/92	Ostreicher	210	683
	30	5,335,510	08/09/94	Rockenfeller, et al.	62	106
	31	5,441,716	08/15/95	Rockenfeller	439	299
	32	5,535,817	07/16/96	Dunne	165	104.12
EXAMINER				DATE CONSIDERED		

Form PTO-1449 Modified		Docket No. SDG-0039	Application No. 10/582,314			
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant S. Douglas Galbraith				
U.S. Department of Commerce Patent and Trademark Office		Filing Date September 12, 2006	Group Not Yet Assigned			
		Confirmation No. Not Yet Assigned				
U. S. PATENT DOCUMENTS						
Examiner Initial		Document No.	Date	Name	Class	Subclass
	33	5,396,775	03/14/95	Rockefeller, et al.	62	112
	34	5,490,398	02/13/96	Cline	62	497
	35	5,590,538	01/07/97	Hsu, et al.	62	51.2
	36	5,728,457	03/17/98	Frechet, et al.	428	310.5
	37	5,842,356	12/01/98	Pfister, et al.	62	480
	38	5,972,077	10/26/99	Judkins, et al.	95	136
	39	6,013,164	01/11/00	Paul, et al.	204	450
	40	6,019,882	02/01/00	Paul, et al.	204	450
	41	6,200,539 B1	03/13/01	Sherman, et al.	422	186.04
	42	6,271,509	08/07/01	Dalton	219	687
	43	6,374,909 B1	04/23/02	Jeter, et al.	165	96
	44	6,434,955 B1	08/20/02	Ng, et al.	62	106
	45	6,512,215	01/28/03	Dalton	219	759
	46	6,692,626 B2	02/17/04	Keefer, et al.	204	491
	47	7,077,891 B2	07/18/06	Jaffe, et al.	96	108
EXAMINER				DATE CONSIDERED		

Form PTO-1449 Modified		Docket No. SDG-0039	Application No. 10/582,314			
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant S. Douglas Galbraith				
U.S. Department of Commerce Patent and Trademark Office		Filing Date September 12, 2006	Group Not Yet Assigned			
		Confirmation No. Not Yet Assigned				
U. S. PATENT DOCUMENTS						
Examiner Initial		Document No.	Date	Name	Class	Subclass
	48	2001/0000889 A1	05/10/01	Yadav, et al.	204	242
	49	2001/0008212 A1	07/19/01	Shepodd, et al.	204	451
	50	2002/0023453 A1	02/28/02	Davidson, et al.	65	259.2
	51	2002/0122728 A1	09/05/02	Darabi, et al.	417	48
	52	2002/0170436 A1	11/21/02	Keefer, et al.	96	121
	53	2003/0015092 A1	01/23/03	Moreau, et al.	95	96
	54	2003/0019238 A1	01/30/03	Pfister, et al.	62	497
	55	2003/008928 A1	05/15/03	Kulprathipanja, et al.	95	45
	56	2003/0116016 A1	06/26/03	Monzyk, et al.	95	148
	57	2003/0131729 A1	07/17/03	Tonkovich, Anna Lee Y, et al.	95	106
	58	2003/0167921 A1	09/11/03	Golden, et al.	95	96
	59	2003/0196885 A1	10/23/03	Marchitto, et al.	204	157.15
	60	2004/0069144 A1	04/15/04	Wegeng, R.S. et al.	95	106
	61	2004/0097371 A1	05/20/04	Jangbarwala, J	502	439
	62	2004/0107831 A1	06/10/04	Graham, et al.	95	96
	63	2004/0118287 A1	06/24/04	Jaffe, et al.	96	121
	64	3,463,944	08/26/69	Melcher	310	10
	65	5,085,780	02/04/92	Ostreicher	210	683
	66	5,669,583	09/23/97	Roth	244	130
EXAMINER				DATE CONSIDERED		